

CLAIMS:

1. A method for setting, in a motor vehicle electrical power steering system of the type which includes a vehicle steering column and a steering assistance motor, the set point of the assistance torque that must be applied to the steering column by the motor, this column having an upper part bearing the steering wheel and a lower part which acts on a mechanical steering device, a method according to which the assistance set point is established from information concerning the torque exerted on the steering wheel, said information concerning the torque being established by measuring of the angle at the site of the steering wheel and at the site of the lower column part, and said set point is established by comparison of the two angle measurements taking into account the rigidity of the steering column between the two angle measurement sites (16), characterized by the fact that the load on steering wheel (2) is computed by comparison of the positions of the two angle sensors; that the variation of the steering wheel (2) load is computed with respect to the speeds of rotation between the two sensors; that PID type filtering is applied to the two measurements made, and the resulting information is used as torque information for computation of the set point of the assistance torque that must be applied to steering column (1) by assistance motor (4).

2. A method according to Claim 1, characterized by the fact that the angle, speed and acceleration of the steering wheel and the position, speed and acceleration of assistance motor (4) acting on lower part (13) of the steering column are measured.

3. A method according to Claim 2, characterized by the fact that an operation for verifying the validity of the acquired measurement values is carried out.

4. A method according to one of Claims 1-3, characterized by the fact that a test is done as to whether recalibration of the assistance function is possible and necessary, and in the case of a negative response, the program for setting the set point of the assistance torque returns to the operation of measuring the magnitudes.

5. A method according to Claim 4, characterized by the fact that in the case of a positive response, a computation of a new compensation with regard to the midpoint position of the steering is done, and if necessary, a recomputation of the value of the play in reducing gear (5) associated with motor (4) is done, and the program, after storage of this information, is brought to the operation of measuring the magnitudes.

6. A method according to Claim 4 or 5, characterized by the fact that the recalibration test is done based on at least the information of the passage of steering wheel (2) through the zero position, the speed of rotation of the steering wheel and of motor (4) which must be less than a predetermined threshold, on the determination that there is no degraded mode in progress, on the possible validation of the data obtained during the operation of measuring the magnitudes.

7. A method according to one of Claims 1-6, characterized by the fact that between upper part (10) and lower part (13) of steering column (1), an intermediate part is provided in the form of torque rod (16), and the rigidity of this rod is taken into account in setting the aforementioned torque set point.

8. A method according to one of Claims 1-7, characterized by the fact that the angle sensor associated with lower part (13) of the steering column is integrated into assistance motor (4).

9. A method according to one of Claims 1-8, characterized by the fact that torque rod (16) is produced as an integral part of steering column (1).

10. A method according to one of Claims 1-8, characterized by the fact that the rod is produced in the form of a part with controlled torsion of steering column (1).

11. A method according to Claim 12, characterized by the fact that the structure itself of steering column (1) is produced in the form of a torque rod.